an embodiment showing a singular component should not necessarily be limited to other embodiments including a plurality of the same component, and vice-versa, unless explicitly stated otherwise herein. Moreover, applicants do not intend for any term in the specification or claims to be ascribed an uncommon or special meaning unless explicitly set forth as such. Further, the present application encompasses present and future known equivalents to the known components referred to herein by way of illustration.

[0049] The foregoing description of the specific embodiments will so fully reveal the general nature of the application that others can, by applying knowledge within the skill of the relevant art(s) (including the contents of the documents cited and incorporated by reference herein), readily modify and/or adapt for various applications such specific embodiments, without undue experimentation, without departing from the general concept of the present application. Such adaptations and modifications are therefore intended to be within the meaning and range of equivalents of the disclosed embodiments, based on the teaching and guidance presented herein. It is to be understood that the phraseology or terminology herein is for the purpose of description and not of limitation, such that the terminology or phraseology of the present specification is to be interpreted by the skilled artisan in light of the teachings and guidance presented herein, in combination with the knowledge of one skilled in the relevant art(s).

[0050] While various embodiments of the present application have been described above, it should be understood that they have been presented by way of example, and not limitation. It would be apparent to one skilled in the relevant art(s) that various changes in form and detail could be made therein without departing from the spirit and scope of the application, while the invention is defined by the features recited in the claims that follow and the respective equivalents of those individual features

1-21. (canceled)

22. In a vehicle having one or more wheels, an apparatus for providing a power assist, comprising:

a moment arm component disposed along a longitudinal axis, having a proximal end and a distal end;

a pivot coupled to a distal end of the moment arm component, wherein at least a portion of the moment arm component rotates with at least a degree of freedom of movement along a first rotational axis about the pivot;

a first wheel rotatably mounted about a second rotation axis, the first wheel being coupled with the pivot, and extending at least partially below of the moment arm component;

a motor to drive the first wheel when energized;

one or more sensors configured to sense a longitudinal force applied substantially along the longitudinal axis and configured to sense a rotational force applied about the pivot; and

a control system configured to output an energize signal which controls whether power is being provided to energize the motor,

wherein the control system deactivates the motor using the energize signal after sensing, by the one or more sensors, a rotational force applied to the moment arm component about the pivot, and wherein the control system activates the motor using the energize signal after sensing, by the sensor, a longitudinal force applied to the moment arm component and instructs the motor to accelerate or decelerate the first wheel in accordance with the direction and magnitude of the longitudinal force applied to the moment arm component.

23. The apparatus according to claim **22**, wherein the first rotational axis and the second rotational axis are disposed in a plane substantially perpendicular to the longitudinal axis.

24. The apparatus according to claim **22**, further comprising a connecting member having a proximal end coupled to the pivot and having a distal end coupled to the first wheel.

25. The apparatus according to claim **22**, wherein one or more sensors are disposed on or within the moment arm component.

26. The apparatus according to claim **22**, wherein one or more sensors are disposed on or within the first wheel.

27. The apparatus according to claim **22**, wherein one or more sensors include a gyroscopic sensor.

28. The apparatus according to claim **22**, wherein the one or more sensors are disposed on or within one or more rigid handles coupled to the proximal end of the moment arm component.

29. The apparatus according to claim **22**, further comprising a load bearing component adjacent to the moment arm component.

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